

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An RF tag, comprising:
 - a receiver for interrogator signal, which receives a signal from an interrogator;
 - a generator for synchronization signal, which generates a synchronization signal based on the interrogator signal received by said receiver for interrogator signal;
 - an acquirer for response information, which acquires response information based on the interrogator signal received by said receiver for interrogator signal;
 - a spread-code modulator, which acquires spread-code modulated response information by spread-code modulating the response information acquired by said acquirer for response information; and
 - a transmitter, which transmits a response signal, which includes the spread-code modulated response information as data area acquired by said spread-code modulator, based on the synchronization signal generated by said generator for synchronization signal at random transmission interval.
2. (Original) The RF tag according to Claim 1, wherein
 - said transmitter comprises,
 - a repeated transmission means, which repeatedly transmits said response signal at random transmission interval.

3. (Original) The RF tag according to Claim 2, comprising:
 - a stopper, which stops transmission by said repeated transmission means.
4. (Original) The RF tag according to Claim 3, comprising:
 - a receiver for stop instruction, which receives a stop instruction, wherein the stop instruction is transmitted from the interrogator based on the response signal transmitted from said transmitter, and is for stopping transmission by said repeated transmission means, and
 - said stopper comprises,
 - a stopping means according to instruction, which stops transmission by repeated transmission means based on the stop instruction received by said receiver for stop instruction.
5. (Original) The RF tag according to Claim 3 or 4, wherein
 - said stopper comprises,
 - a releasing means for stop instruction, which releases said stopped state.
6. (Currently Amended) The RF tag according to Claim 3 or 4 any one of Claims 3 to 5, wherein
 - said stopper comprises:
 - an acquisition means for proof information, which acquires proof information corresponding to the response signal transmitted from said transmitter; and
 - a proof-dependent stopping means, which stops transmission only when the proof information acquired by said acquisition means for proof information fulfils a predetermined

condition.

7. (Currently Amended) The RF tag according to any one of Claims 1 to 4 ~~Claims 1 to 6~~, wherein

 said random transmission interval is a random transmission interval based on a predetermined rule.

8. (Original) The RF tag according to Claim 7, wherein

 in said predetermined rule, an average value of transmission interval is a certain period of time.

9. (Currently Amended) The RF tag according to any one of Claims 1 to 4 ~~Claims 1 to 8~~, comprising:

 a storage for RFID information, which stores RFID information, which is information for unique identification of itself, wherein

 the response signal acquired by said acquirer for response information includes the RFID information acquired from said Storage for RFID information.

10. (Currently Amended) The RF tag according to any one of Claims 1 to 4 ~~Claims 1 to 9~~, comprising:

 a storage for identification code, which stores an identification code; and
 a generator for header, which generates a header including the identification code stored in said storage for identification code.

11. (Original) The RF tag according to Claim 10, wherein
a signal configuring said header is an non-interferential signal even if it is overlapped
with a signal configuring a data area of another RF tag having the same configuration as that of
itself upon decoding of the spread-code by the interrogator.
12. (Original) The RF tag according to Claim 10, wherein
a signal configuring said data area is an non-interferential signal even if it is overlapped
with a signal configuring a header of another RF tag having the same configuration as that of
itself upon decoding of the spread-code by the interrogator.
13. (Currently Amended) A RF tag set, comprising an aggregation of a plurality of the RF tag
according to any one of Claims 1 to 4 ~~Claims 1 to 9~~.
14. (Currently Amended) An RF tag set, comprising an aggregation of a plurality of the RF
tags according to Claim 11 ~~any one of Claims 10 to 12~~.
15. (Original) The RF tag set according to Claim 14, wherein
an identification code of said header is common among said aggregation of a plurality of
RF tags.
16. (Currently Amended) The RF tag set according to Claim 15 ~~any one of Claims 13 to 15~~,
wherein
the spread-codes used in the different tags are different from each other, in which the

spread-code is used in the spread-code modulator of respective RF tags in said aggregation of a plurality of RF tags.

17. (Currently Amended) The RF tag set according to Claim 15 ~~any one of Claims 13 to 15~~, wherein

a plurality of spread-codes are used in the spread-code modulator of respective RF tags in said aggregation of a plurality of RF tags.

18. (Original) An interrogator, comprising:

an acquirer for interrogator signal, which acquires a interrogator signal;

a transmitter for interrogator signal, which transmits the interrogator signal acquired by the acquirer for interrogator signal;

an acquirer for synchronization signal, which acquires a synchronization signal correlated with said interrogator signal; and

a receiver for response signal, which receives a response signal from RF tag to the interrogator signal transmitted from said transmitter for interrogator signal on the basis of the synchronization signal acquired by said acquirer for synchronization signal.

19. (Original) The interrogator according to Claim 18, comprising:

a measurer for response signal intensity, which measures intensity of the response signal received by said receiver for response signal;

a selector, which selects the response signal having a predetermined response signal intensity measured by said measurer for response signal intensity; and

a first decoder, which decodes the response signal selected by said selector.

20. (Original) The interrogator according to Claim 19, wherein
the first decoder comprises,
an acquisition means for RFID information, which acquires RFID information for unique
identification of the RF tag according to Claim 9 by decoding spread-code modulated response
information,
comprising:
a transmitter for stop instruction, which transmits a stop instruction for stopping
transmission of a signal to the RF tag according to Claim 9, which is identified by the RFID
information acquired by said acquisition means for RFID information.

21. (Original) The interrogator according to Claim 18, comprising:
a measurer for response signal intensity, which measures intensity of the response signal
received by said receiver for response signal; and
a second decoder, which decodes a response signal, of which intensity fulfils a
predetermined condition, if the response signal intensity measured by said measurer for response
signal intensity fulfils a predetermined condition.

22. (Original) The interrogator according to Claim 21, wherein
said second decoder comprises,
an acquisition means for RFID information, which acquires the RFID information, which is
information for unique identification of the RF tag according to Claim 9, by decoding the spread-

code modulated response information,

comprising:

a transmitter for stop instruction, which transmits a stop instruction for stopping transmission of a signal to the RF tag according to Claim 9, which is identified by the RFID information acquired by said acquisition means for RFID information.

23. (Currently Amended) The interrogator according to Claim 19 or 21 ~~any one of Claims 19 to 22~~, wherein

said response signal comprises,

a header including an identification code for measuring the response signal intensity, and
said measurer for response signal intensity comprises,

a correlator, which measures said response signal intensity based on a correlation
between an identification code included in said header and a predetermined reference code.

24. (Currently Amended) The interrogator according to Claim 19 ~~any one of Claims 19 to 23~~,
wherein

said measurer for response signal intensity comprises,

a storage means for measurement time constant, which stores said measurement time
constant for setting a measurement time for measuring said response signal intensity.

25. (Original) The interrogator according to Claim 24, wherein

the measurement time constant stored by said storage means for measurement time
constant is a maximum value of response signal length.

26. (Original) The interrogator according to Claim 24 or 25, wherein
said measurer for response signal intensity comprises,
a changing means for measurement time constant, which changes said measurement time
constant.

27. (Original) The interrogator according to Claim 24, wherein
the measurement time constant stored by said storage means for measurement time
constant is a maximum value of header length.

28. (New) An RF tag set, comprising an aggregation of a plurality of the RF tags according to
Claim 12.